Third United Nations International Conference on the Peaceful Uses of Atomic Energy

A/CONF.28/A/380
USSR
February 1964
Original: RUSSIAN

Confidential until official release during Conference

Abstract

GUIDE PROVIDING NUCLEAR SAFETY OF POWER REACTOR IN THE USSR

G.A.Gladkov, B.A.Buynizky, Yu.G.Nikolaev et al

At present a guide providing nuclear safety of power reactors has been developed in the USSR. The guide is obligatory for all researc and designing organizations. The guide comprises a code of requirements to the reactors and auxiliary systems, designed to exclude the possibility of uncontrolled power growth. The primary attention is devoted to the automatic control and emergency shielding systems.

The guide regulates the measures providing the impossibility of fast reactivity introduction compared to the portion of delayed neutrons during all unstable processes: power variation, heat-up and cooling after emergency shielding action . The guide introduces the requirements contributing to emergency shielding reliability. The conditions which the core construction must satisfy are established from the point of nuclear safety.

The paper contains the discussion on the operative rules.

Translation provided by courtesy of the submitting Government